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Lecithoceridae (Lepidoptera) **of Taiwan (III)** **Subfamily Torodorinae: genus *Torodora* Meyrick**

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Abstract Six species belonging to the genus *Torodora* of the subfamily Torodorinae from Taiwan are reviewed, with descriptions of two new species: *Torodora albicruris* sp. nov. and *T. capillaris* sp. nov. *Torodora octavana* Meyrick, *T. sciadosa* Wu & Liu, and *T. manoconta* Wu & Liu are reported for the first time from Taiwan. A key to the species and illustrations of the genitalia are provided.

Key words Systematics, Lepidoptera, Lecithoceridae, *Torodora*, Taiwan.

Introduction

This article is the 3rd part (for the 1st, see Park, 1999; 2nd *in prep.*) of a series of taxonomic studies of the Lecithoceridae in Taiwan. The subfamily Torodorinae is well defined by the structure of the male genitalia, lacking the bridgelike structure connecting tegumen and valva, and all of them having spinous zones on the abdominal tergites. A part of the genera have M_2 in the hindwing, but in many of them M_2 is absent in the hindwing. The subfamily comprises about 220 species belonging to 35 genera.

Most of them occur in the Oriental region, with less than 20 species in the Palaearctic region, and few in the Australian region. Among the 85 reported species of the genus *Torodora*, 82 species are known in the Oriental region, two species in the Palaearctic and one in the Ethiopian region. Wu (1994, 1997) reviewed Chinese species, with 37 species, and recently Wu & Park (1999) reviewed species of Sri Lanka, representing nine species.

The material examined for this study was largely based on collections in the Smithsonian Institution, US National Museum of Natural History (USNM), Washington DC, the Florida State Collection of Arthropods (FSCA), Gainesville, Florida, and on the authors' recent collecting (1996, 1997) in Taiwan. Old names of the localities were given with their present localities in parenthesis.

Abbreviations for depositories of material, including the above two, are as follows: The Natural History Museum (formerly the British Museum [Natural History]) (BMNH), London, UK; the Hungarian Museum of Natural History (HMNH), Budapest, Hungary; the Institute of Zoology, Academia Sinica (IZAS), Beijing, China; Taiwan Forestry Research Institute (TFRI), Taipei, Taiwan; Center for Insect Systematics (CIS), Kangwon National University, Chunchon, Korea. Types which are indicated as "on indefinite loan from Taiwan" will be placed in the National Taiwan Museum [NTM], Taipei or an institute in Taiwan.

Systematic accounts

Torodora Meyrick, 1894

Trans. ent. Soc. Lond. **1894**: 16. Type species: *T. characteris* Meyrick, 1894 [Burma].
=*Habrogenes* Meyrick, 1918, *Exot. Microlepid.* **2**: 102 [N. India].
=*Panplatyceros* Diakonoff, 1952, *Ark. Zool.* **3**: 76 [N.E. Burma].

Forewing relatively broad, apex obtuse, termen slightly sinuate; M_1 arising far from stalk of $R_3+R_4+R_5$; M_1 and M_2 almost parallel; M_2 and M_3 free; CuA_1 and CuA_2 stalked at 1/3 basally; cell completely closed. Hindwing much broader than forewing, all veins free; M_2 remote from M_3; M_3 and CuA_1 connate or stalked. Cell short, closed. However, we found that the venations of both wings do not quite agree in all species of the genus *Torodora*, especially in the condition of M_2 and M_3 on the forewings, and M_3 and CuA_1 on the hindwings: 1) M_2 and M_3 free on the forewing, M_3 and CuA_1 also free on the hindwing, as in the type species, *characteris* Meyrick (*mactata* Wu, *octavana* Meyrick); 2) M_2 and M_3 stalked near base on forewing, and M_3 and CuA_1 stalked near 1/5 on hindwing (*penunca* Wu); 3) M_2 and M_3 stalked near middle on forewing, M_3 and CuA_1 stalked before middle in hindwing (*angulata* Wu & Liu, *virginopis* Gozmány, *ocreatana* Wu & Liu, *milichina* Wu & Liu, *durabila* Wu & Liu, *iresina* Wu & Liu, *galera* Wu & Liu, *aenoptera* Gozmány and *sciadosa* Wu & Liu); 4) M_2 and M_3 stalked near middle on the forewing, M_3 and CuA_1 stalked near or beyond middle on the hindwing (*manoconta* Wu & Liu and *malthodesa* Wu & Liu). Abdomen with dense spines on tergites. The distributional range of the genus is from India to SE Asia, including Borneo and Philippines. Only one species, *T. hybrista* Meyrick, has been reported from Senegal, Africa, but a further study of this is needed.

Key to the species of *Torodora* in Taiwan

[Adult]

1. Forewing with dark brown postmedian fascia .... *octavana* Meyrick
- Forewing monotonous, without such fascia 2
2. Forewing ground colour yellowish orange-brown .... *parthenopis* Meyrick
- Forewing ground colour light brown or brown 3
3. Hindtibia clothed with dark brown hairlike scales 4
- Hindtibia normal, clothed with light brown scales 5
4. Hindtibia clothed with dark brown scales except apex .... *sciadosa* Wu & Liu
- Hindtibia clothed with dark brown scales on anterior 2/5 and with whitish scales beyond it .... *albicruris* sp. nov.
5. Wingspan shorter than 16 mm; forewing relatively short, with distinct discal spots... *capillaris* sp. nov.
- Wingspan longer than 19 mm; forewing narrow, discal spots not visible .... *manoconta* Wu & Liu

[Male genitalia]

1. Uncus heavily dilated distally 3
- Uncus parallel or rather narrowed apically 2
2. Valva normally elongated with round outer margin .... *octavana* Meyrick
- Valva with characteristically incurved outer margin, heavily angled on ventral

corner .... *albicruris* sp. nov.
3. Valva with a long hair tuft on ventral margin .... *capillaris* sp. nov.
- Valva without such hairy tuft on ventral margin 4
4. Valva foot-shaped; aedeagus not spinous in vesica, with two pairs of cornuti .... *manoconta* Wu & Liu
- Valva normally elongate; aedeagus spinous in vesica, without lobe like cornuti 5
5. Valva narrow, slender; aedeagus with 3–4 lobelike cornuti ...... *parthenopis* Meyrick
- Valva moderate; aedeagus without lobelike cornuti .... *sciadosa* Wu & Liu

Torodora parthenopis (Meyrick, 1932) (Figs 1, 7a, 7b, 13)

Lecithocera parthenopis Meyrick, 1932: 204; Gaede, 1937: 525; Clarke, 1965: 155, pl. 77, fig. 2. Type: ♀, Hassensan, Formosa, BMNH-8773/Clarke, Coll. BMNH.
Torodora parthenopis: Gozmány, 1978: 208, pl. 12, fig. 128.

Diagnosis. Male and female. Wingspan, 13.0–17.0 mm. This species is characterized by the yellowish orange-brown of forewings with acute apex, and distinct 5 black spots along termen.

Male genitalia (Figs 7a, 7b). Uncus relatively broadened distally. Valva similar to that of *sciadosa* Wu & Liu, but much more slender, with relatively narrow base. Aedeagus stout, as long as valva, narrower to apex; signum consisting of a row of short spines and 3–4 long lobes at base.

Female genitalia (Fig. 14). See also Clarke (1965, pl. 17, figs 2a–c) and Gozmâny (1978, pl. 80, fig. 128). Ostium broad; antrum weakly developed. Ductus bursae sack-shaped, as long as corpus bursae, with cone-shaped short spines near 1/3 and 2/3; ductus seminalis arising from middle. Corpus bursae large, with oval-shaped signum plate bearing numerous spines.

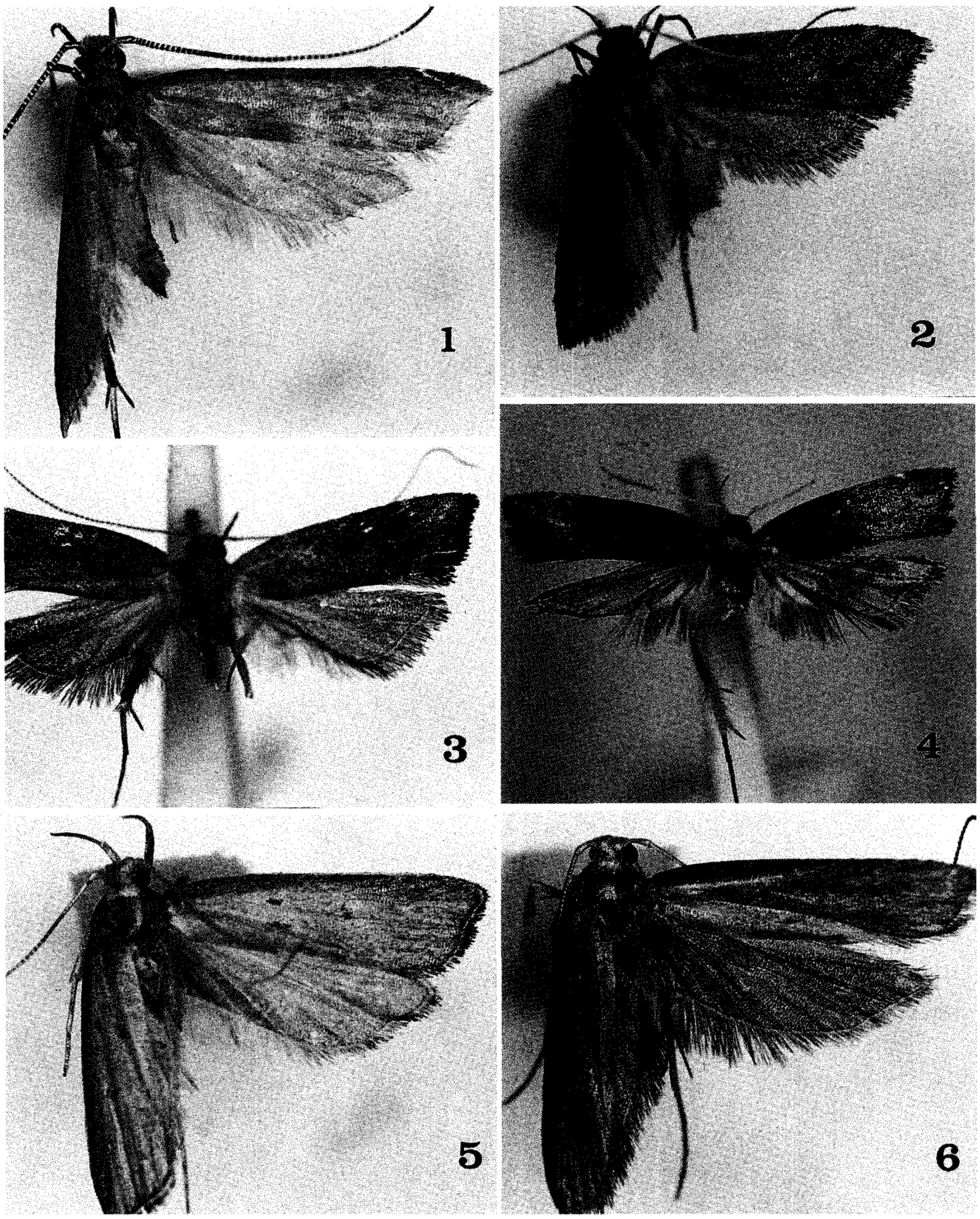
Material examined. 1 ♀, Sozan (=Yangmingshan), Taipei Co., E. VII. 1921 (S. Issiki), gen. no. 4079/Park; 1 ♂, Raisya (=Juisui Hot Springs), Hualien Co., 23. XI. 1934 (S. Issiki), Issiki Coll. 1972; 1 ex. (abdomen missed), Suishya (=Shuishe), Nantou Co., 20. IX. 1943 (S. Issiki), Issiki Coll. 1972—USNM; 1 ♀, Chingshan, 1,100 m, Taichung Co., 31. VIII–4. IX. 1988 (J. B. Heppner & H. Wang), gen. slide no. 4298/Park; 1 ♀, Kaohsiung Co., Liukuei, Shanpin For. 16–23. III. 1990 (J. B. Heppner & H. Wang)—FSCA; 1 ♂, Ming-chr, 1,160 m, Ilan Co., 9–10. VII. 1996 (K. T. Park); 2 ♂ 1 ♀, Fushan, Ilan Co., 29. VIII. 1995 (T. Jou), light trap, site B, 0500; 1 ♂, Fushan, Ilan Co., 27. VII. 1995 (A. Warnke), light trap, site C, 0000—TFRI; 1 ♀, Kukuan, 720 m, Taroko Nat. Park, Taichung Co., 8. VII. 1996 (K. T. Park)—CIS.

Distribution. Taiwan (endemic).

Torodora octavana (Meyrick, 1911) (Figs 2, 8a, 8b, 14)

Brachmia octavana Meyrick, 1911: 714. Lectotype: ♀, Khasi Hills, Assam. Slide No. 8850. Coll. BMNH.
Lecithocera octavana: Clarke, 1965: 148, pl. 74, figs 2, 2a, 2b, 2c.
Torodora octavana: Gozmány, 1978: 201, fig. 120; Wu, 1997: 62, pl. 1, fig. 1, pl. 24, fig. 1, pl. 37, fig. 1.

Diagnosis. Male. Wingspan 16.0–18.0 mm. The Taiwanese specimens show some differences in its size of the moths, smaller than the types of *octavana* Meyrick, wingspan 16–



Figs 1–6. Adults of *Torodora* spp. 1. *T. parthenopis* (Meyrick). 2. *T. octavana* (Meyrick). 3. *T. sciadosa* Wu & Liu. 4. *T. albicruris* sp. nov. 5. *T. capillaris* sp. nov. 6. *T. manoconta* Wu & Liu.

18 mm; with well defined, dark-brown postmedian fascia; in the male genitalia, uncus rather shorter and weaker, cucullus of valva shorter and less elongated, and basal expansion of costa rather angled at the anterior margin.

Male genitalia (Figs 8a, 8b). See also Gozmány (1978: 201, pl. 45, fig. 120). Uncus relatively short compared to length of gnathos; gnathos long, with acute apex. Valva foot-shaped, base of costal margin expanded outwardly, outer margin rather angled; distal half densely setose. Juxta shield-shaped. Aedeagus as long as valva, basal part slightly narrower than valva, pistol-like, with a bundle of long, needle-like cornuti, one cornutus stronger than others.

Female genitalia (Fig. 14). See also Clarke (1965: 148, pl. 74, fig. 2) and Gozmány (1978: 201, pl. 78, fig. 120). Apophyses anteriores relatively long, as long as 2/3 of posteriores.

Material examined. 6 ♂ ♀, Kenting Park, 50 m, Pingtung Co., 1-5. IX. 1983 (J. B. Heppner), 1 ♂, same locality, 29-31. VIII. 1983 (J. B. Heppner); 2 ♂ 1 ♀, Kenting Park, 255 m, Pingtung Co., 23-28. IV. 1989 (J. B. Heppner & H. Wang), 1 ♀, same locality, 9-15. III. 1990 (J. B. Heppner & H. Wang); 1 ♂, Chipen Hot Springs, 100 m, Taichung Co., 28. VIII. 1983; 1 ♂, Liukuei, Shanpin For. Stn, 750 m, Kaohsiung Co., 29. IV-3. V. 1989 (J. B. Heppner & H. Wang); gen. slide no. 4122; 4 ♂ 1 ♀, Liukuei, Shanpin For. Stn, Kaohsiung Co., 16-23. III. 1990 (J. B. Heppner & H. Wang); gen. slide no. 4101; 5 ♂ ♀, Meifeng Hort. Stn., Nantou Co., 6-10. IX. 1988 (J. B. Heppner & H. Wang)—FSCA; 2 ♂, Kukuan, 720 m, Taroko Nat. Park, Taichung Co., 8. VII. 1996 (K. T. Park); 1 ♀, Shanpin For. Stn, 750 m, Liukuei 10 km SE Kaohsiung Co., 5-6. VII. 1996 (K. T. Park)—CIS; 1 ex. (abdomen missed), without date and locality label, Taiwan, S. Issilki, S. Issiki Coll. 1972—USNM. Compared with Chinese specimens in the USNM: 1 ♂ 1 ♀, Kwanhsien, China, VII. 28. E. Meyrick, in Meyrick Coll., gen. slide no. 14040; 2 ♀, Shilong, Sept.-Oct. 18 (Fletcher coll.); lectotype, ♀, gen. slide no. BM-8850/Clarke; 1 ♂, Khasi Hills Assam, 9. 1906, E Meyrick, in Meyrick Coll.

Distribution. Taiwan (new record), China (Sichuan, Kwanhsien, Zhejiang), India.

Remarks. This species was described from the Khasi Hills, India and also reported from China. A little difference was found in the forewing pattern and male genitalia between the types and the Taiwanese specimens as mentioned in the diagnosis, but it is considered that they are not enough to separate them at the moment. Thus, we tentatively treat it as conspecific with this species.

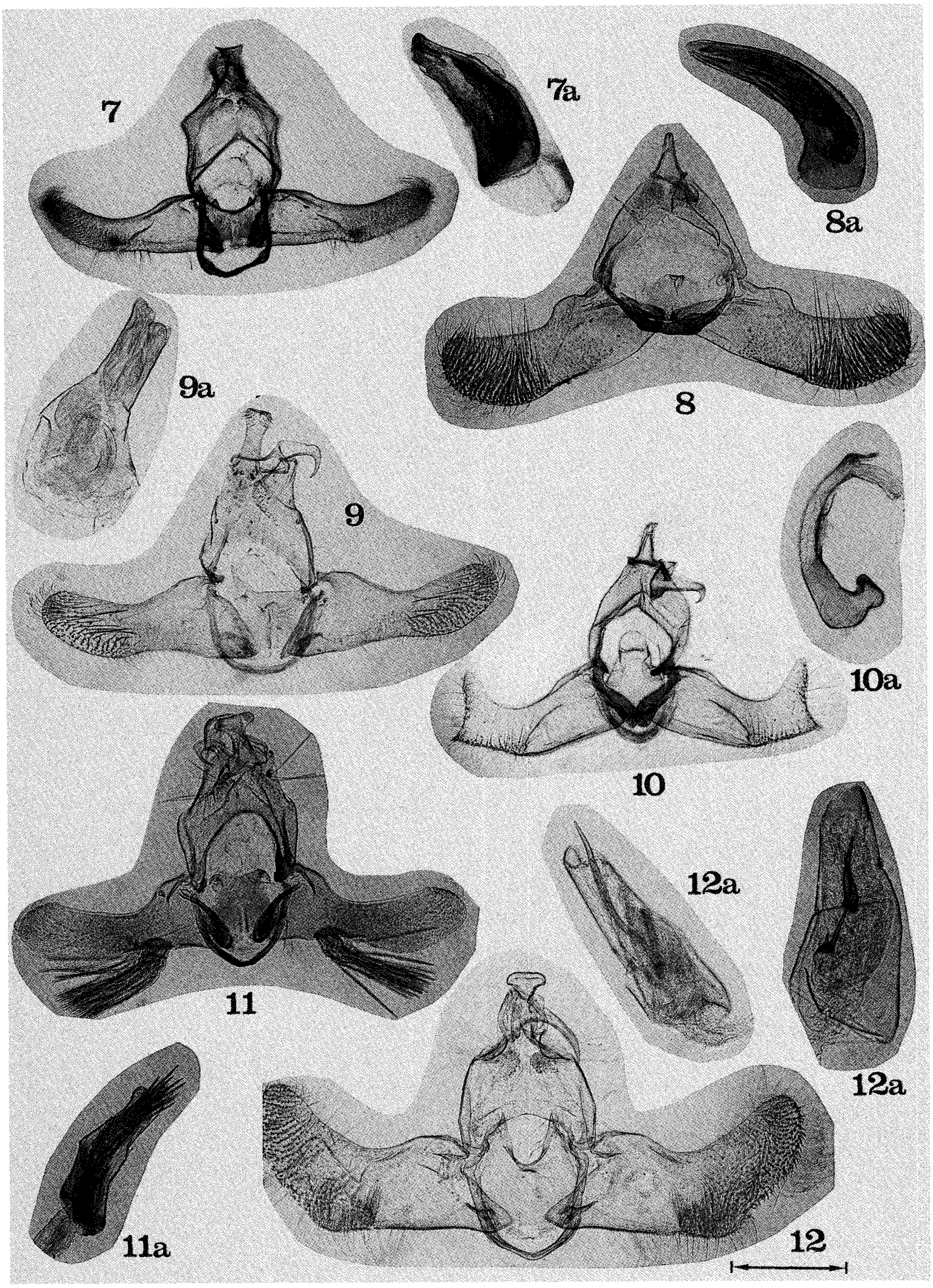
Torodora sciadosa Wu & Liu, 1994 (Figs 3, 9a, 9b, 15)

Torodora sciadosa Wu & Liu, 1994: 165, fig. 12; Wu, 1997: 68, pl. 2, fig. 6. Holotype: ♂, Mt Emeishan, Sichuan Prov., China (Y. Liu).

Diagnosis. Wingspan 18.0 mm. This species is similar externally to *opportuna* Meyrick which was described from Assam, and *flavescence* Gozmány from Prov. Sichuan, China, but it differs from the latter by the male genitalia (lectotype, 8753/Clarke): shape of valva, uncus and distributional pattern of spinous zones. The species is hardly distinguishable from the following new species in the shape of the forewing, but it can be easily separated by the hind tibia: it is covered with brown scales except the apical part. Forewing length 14.5-15 mm. Forewing venation with R_5 to termen; R_4 and R_5 stalked beyond 2/3; M_1 originating far from stalk of R_{4+5}; M_2 approaching stalk of M_3; CuA_1 and CuA_2 shortly stalked. Hindwing with M_3 and CuA_1 shortly stalked; M_2 approaching stalk of M_3+CuA_1. Female is reported for the first time and its genitalia are illustrated

Male genitalia (Figs 9a, 9b). See also Wu (1997: 68, pl. 2, fig. 6). Uncus broadened distally, distal margin rounded medially, with about 10 setae each laterally. Gnathos heavily bent beyond middle, about as long as uncus. Valva foot-shaped, elongated, with numerous setae distally, outer margin round. Aedeagus as long as valva, basal half bulbed.

Female genitalia (Fig. 15). Distal margin of 8th sternite emarginated at middle, with



Figs 7–12. Male genitalia (a) and aedeagus (b) of *Torodora* spp. 7. *T. parthenopis* (Meyrick). 8. *T. octavana* (Meyrick). 9. *T. sciadosa* Wu & Liu. 10. *T. albicruris* sp. nov. 11. *T. capillaris* sp. nov. 12. *T. manoconta* Wu & Liu (two different types of aedeagi).

expanded lobes laterally. Ductus bursae slightly longer than the length of corpus bursae, with few spinous denticles; ductus seminalis arising from middle. Corpus bursae ovate; signum plate ovate with numerous spines on surface, about 2/3 of corpus bursae in length.

Material examined. 1 ♂, Rengwati (=Lienhuachi), Nantou Co., 21. III. 1943 (S. Issiki), Issiki Coll. 1972, gen. slide no. 4281; 1 ♀, Raisya (=Juisui Hot Springs), Hualien Co., 22. XI. 1934 (S. Issiki), Issiki Coll. 1972, gen. slide no. 4092; 1 ♀, Kanshirei (=Kuantzuling), Tainan Co., 19. X. 1934 (S. Issiki), gen. slide no. 4285—USNM; 2 ♂ 3 ♀, Kenting Park, Pingtung Co., 9-15. III. 1990 (J. B. Heppner & H. Wang), gen. slide no. 4512, 4515/ Park—FSCA.

Distribution. Taiwan (new record), China (Sichuan).

Torodora albicruris **sp. nov.** (Figs 4, 10a, 10b)

Diagnosis. This species is hardly distinguishable from *sciadosa* Wu & Liu, but it is separated by the hind tibia being clothed with brown hair-like scales at basal 2/5, but whitish scales at distal 3/5—this is a good character for separation from the other related species of the genus; antenna without annulations and cilia. The male genitalia also have a good separable character with outermargin of valva unusually incurved.

Description. Male. Wingspan 12.0 mm. Labial palpus with second segment light brown outwardly, shiny creamy-white inwardly; 3rd as long as 2nd, slender, dark brown ventrally, with acute apex. Forewing light brown, with small yellowish white patch at 4/5 of costa, and with a dark brown discal dot; R_3 stalked with R_{4+5} before middle, R_5 to termen, M_2 and M_3 connate or stalked, CuA_1 and CuA_2 stalked near base. Hindwing grey, as wide as forewing; apex relatively acute; termen sinuate; M_3 and CuA_1 stalked near middle, not connate as in the type species of the genus. Hindtibia characteristically with brown hair-like scales at basal 2/5 and whitish scales beyond there.

Female unknown.

Male genitalia (Figs 10a, 10b). Uncus moderate. Gnathos relatively strong, bent at apical 3/4. Valva characteristically incurved on outer margin; ventral corner stongly angled, acute. Aedeagus slender, curved, with apical sclerotized lobe.

Type. Holotype, ♂, Kansirei (=Kuantzuling), Tainan Co., 19. X. 1934 (S. Issiki), gen. slide no. 4091/Park.

Distribution. Taiwan (endemic).

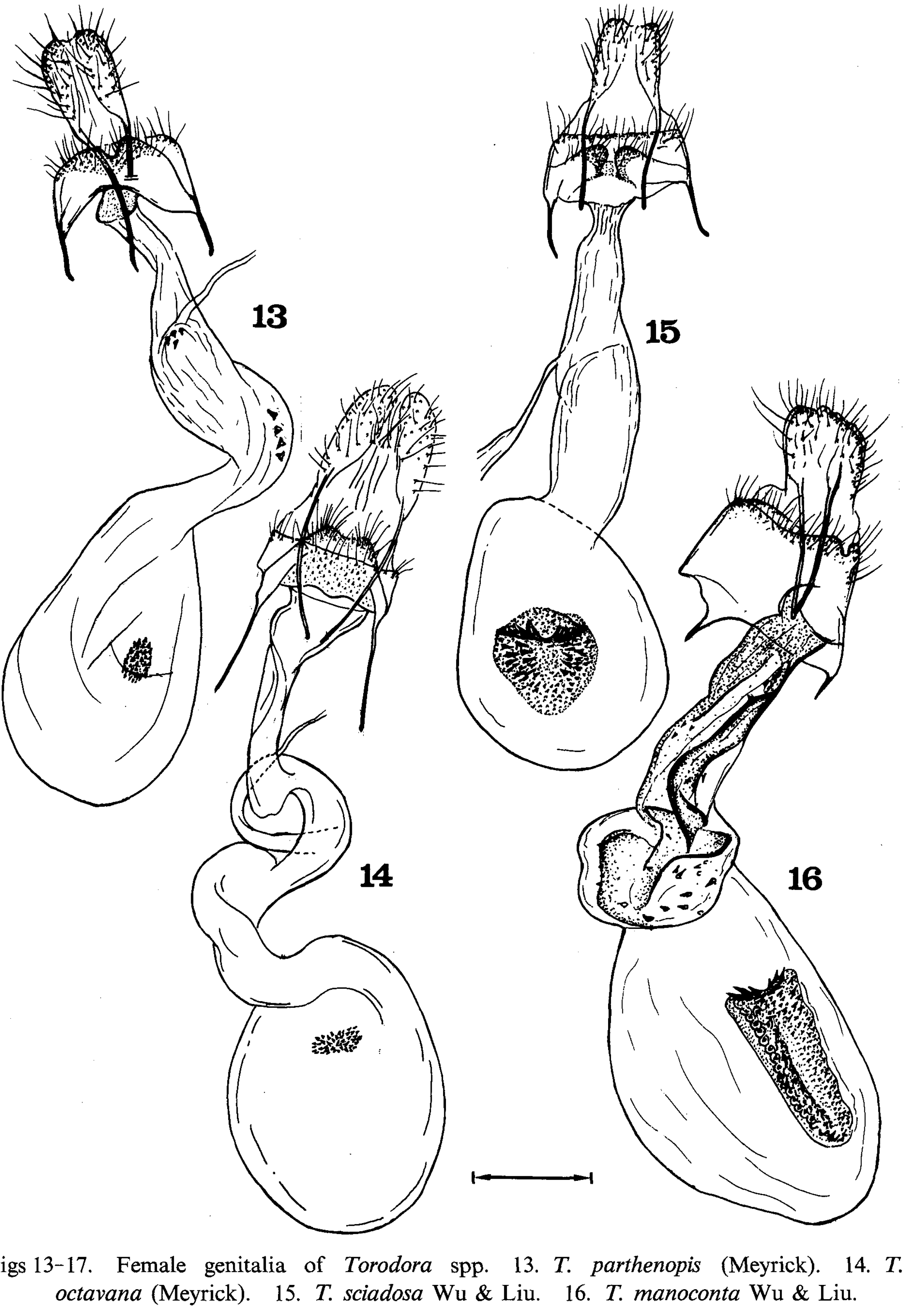
Remark. The valva in the male genitalia is somewhat different from the common species of this genus, but the venation, except M_3 and CuA_1 stalked, agrees with *Torodora*.

Etymology. The name was derived from the white colour (L. *albus*=white) of the hindtibia (L. *crus*=leg).

Torodora capillaris **sp. nov.** (Figs 5, 11a, 11b)

Diagnosis. The male genitalia of this new species are very close to those of *T. aenoptera* Gozmany, but the forewing ground colour is pale greyish orange, instead of brown in the latter, and with distinct discal dots.

Description. Male. Wingspan 15.5-16.0 mm. A seasonal dimorphism is observed in the



Figs 13–17. Female genitalia of *Torodora* spp. 13. *T. parthenopis* (Meyrick). 14. *T. octavana* (Meyrick). 15. *T. sciadosa* Wu & Liu. 16. *T. manoconta* Wu & Liu.

imago. Summer form (holotype): Head, thorax shiny orange white; tegula speckled with brown scales. Antenna orange white; annulation on flagella indistinct. Labial palpus long, slender, gently upturned; 2nd segment relatively stout, brownish orange outwardly, paler toward apex; 3rd as long as 2nd, dark brown ventrally. Forewing pale orange, but brown scales scattered on upper 1/4 along costa; costa pale yellow anteriorly; with a pair of discal dots dark brown, distinct, one at middle and the other larger one at end of cell; a short, plical streak below middle discal dot; apex obtuse; dark brown row along termen; cilia dark brown, but yellow basally; R_3, R_4 and R_5 stalked, M_1 relatively close to base of $R_3+R_4+R_5$, M_2 close to M_3 at base, CuA_1 and CuA_2 stalked; cell closed. Hindwing grey; M_2 present, M_3 and CuA_1 stalked near base.

Spring form (a paratype): Head, thorax, tegula orange grey. Antenna brownish orange, with dark brown annulations on flagella dorsally. 2nd segment of labial palpus rather stout. Forewing pale greyish orange, costal area concolorous, not pale yellow anteriorly; 4–5 short dark brown streaks along costa beyond 2/3 and other 5 along termen. Hindwing grey.

Female unknown.

Male genitalia (Figs 11a, 11b). Uncus expanded laterally at apex, slightly emarginated on distal margin. Gnathos relatively short, bent beyond middle. Tegumen with tufts of long setae dorsodistally. Valva similar to that of *sciadosa* Wu & Liu, foot-shaped, elongated; costa expanded at basal 1/4; with a tuft of long setae characteristically at basal 1/3 of ventral margin; outer margin round. Aedeagus as long as valva, pistol-like, with a bundle of long, needle-like cornuti.

Types. Holotype, ♂, Fushan For. Stn, 650 m, Ilan Co., 4–11. IV. 1990 (J. B. Heppner), gen. slide no. 4105/Park—FSCA (on definite loan from Taiwan). Paratypes: 1 ♂, Upper Palain, 2,260 m, Ilan Co., 11–12. VII. 1996; 1 ♂, Wulai, 550 m, Taipei Co., 1–2.VII. 1996 (K. T. Park)—CIS.

Distribution. Taiwan (endemic).

Etymology. The name was derived from the hairy tufts (L. *capillus* = hair) arising from the ventral margin of the valva medially.

Torodora manoconta Wu & Liu, 1994 (Figs 6, 12a, 12b, 16)

Torodora manoconta Wu & Liu, 1994: 164, fig. 9; Wu, 1997: 67, pl. 2, fig. 3. Holotype: ♂, Mt Jiulianshan, Jiangxi Prov., China (Y. Liu).

Diagnosis. This species was described from Jiangxi and Yunnan, southern part of China, and all male type specimens of *manoconta* (gen. slide no. W-88007, 88008, 93019, 93031) have similar types of cornuti, with a pair consisting of one long and one short one. However, the Taiwanese specimens have two pairs of cornuti: short lobe of the distal pair about 4/5 of longer one; anterior pair similar to that of *manoconta*. It is considered that part of cornuti was probably removed. The original description of this species is not detailed enough to explain the superficial and genital characters, thus a redescription is given.

Description. Male and female. Wingspan 19.0–22.0 mm. Head shiny, yellowish white, with more yellowish erect scales laterally. Tegula and thorax greyish brown. Antenna longer than apex of wings; scape slender, apex slightly dilated; flagella with weak annulation beyond 2/3, not ciliate. Labial palpus long, slender, gently upturned; 2nd segment slightly thickened, dark brown at basal half dorsally, ochreous on inner and upper surfaces; 3rd as long as 2nd. Forewing elongate, slightly wider towards termen; greyish brown throughout without pattern, with a faint discal dot at end of cell; R_3, R_4 and R_5 stalked, M_1 relatively close to base of $R_3+R_4+R_5$, M_2 close to M_3 at base, CuA_1 and CuA_2 stalked; cell closed. Hindwing grey; M_2 present, M_3 and CuA_1 stalked at middle. This character is different from the common species of *Torodora*. Under surface of legs pale greyish brown; hindtibia with strong setiform scales above. Abdominal tergites with broad zones of dense spines; 8th tergite with a simple bandlike sclerotization on anterior margin. The female is reported for the first time.

Male genitalia (Figs 13a, 13b). See also Wu (1994, fig. 164; 1997, pl. 2, fig. 3). Uncus with expanded, mushroom-like apex; gnathos rather strong, as long as uncus; valva with costal margin curved inwardly into S-shape, relatively broad throughout, apex rather rounded; juxta with sharply pointed short lateral lobes, inner margin round. Aedeagus short, broader towards base with two pairs of cornuti: shorter lobe of the 1st pair about 4/5, but shorter one of 2nd pair very short, about 1/5.

Female genitalia (Fig. 16). Eighth sternite emarginated in saddle-shape at middle. Ostium broad; antrum not well defined. Ductus bursae broad, with a long band-like sclerotized plate longitudinally and few spines. Corpus bursae large, ovate; signum plate large, long, strawberry-shaped, spinous, about half of corpus bursae in length.

Material examined. 1 ♂, Shanpin For. Stn. 750 m, Liukuei 10 km SE Kaohsiung Co., 5-6. VII. 1986 (K. T. Park & H. K. Lee), gen. slide no. 4183; 3 ♂, Wulai 550 m, Taipei Co., Taiwan, 1-2. VII. 1996 (K. T. Park & J. S. Lee); gen. slide no. 4186—CIS; 2 ♂, Liukuei, Shanpin For. Stn. 750 m, Kaohsiung Co., 16-23. III. 1986 (J. B. Heppner & H. Wang); 2 ♂ 3 ♀, same locality, 29. IV-3. V. 1989 (J. B. Heppner & H. Wang), gen. slide no. 4187; 2 ♀, Chingshan 1,100 m, Taichung Co., 8-11. V. 1989 (J. B. Heppner & H. Wang), gen. slide no. 4109—FSCA.

Distribution. Taiwan (new record), China (Jiangxi, Yunnan).

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References

Clarke, J. F. G., 1965. *Catalogue of the Type Specimens of Microlepidoptera in the British Museum (Natural History) described by Edward Meyrick* **5**: 1-255.

Diakonoff, A., 1952. Entomological results of Swedish expedition 1934 to Burma and British India. Lepidoptera collected by R. Malaise. Microlepidoptera I. *Ark. Zool.* **3**: 73-79.

Gozmâny, L., 1978. Timyridae. *In* Amsel, H. G., Gregor, F. and H. Reisser (Eds), *Microlepidoptera palaeartica* **5**: 1-258. Verlag Georg Fromme, Wien.

Meyrick, E., 1911. Descriptions of Indian Micro-Lepidoptera. *J. Bombay nat. Hist. Soc.* **20**: 707-715.

———, 1918-1932. *Exotic Microlepidoptera* **2**: 102 (1918); **4**: 203-205 (1932). Marlborough, Wilts.

———, 1925. Family Gelechiidae. Lepidoptera Heterocera. *In* Wytsman, P. (Ed.), *Genera Insect.* **184**: 1-290, pls 1-5. Bruxelles.

Park, K. T., 1999. Lecithoceridae of Taiwan (1): Subfamily Lecithocerinae: Genus *Homalxestis* Meyrick and *Lecithocera* Herrich-Shäffer. *Zool. Stud.* **38**: 238-256.

Wu, C. 1997. Lepidoptera Lecithoceridae. *Fauna Sinica* (Insecta) **7**. x, 306 pp. (38 pls). Science

Press, Beijing.

Wu, C. & K. T. Park, 1999. A taxonomic review of the Lecithoceridae (Lepidoptera) in Sri Lanka I. The subfamily Torodorinae: Genera *Torodora* and allies. *Tinea* **16**: 61-72.

Wu, C. & Y. Liu, 1994. A study of Chinese *Torodora* Meyrick, 1894 and description of new species. *Sinozoologia* **11**: 155-173.

摘　要

台湾のヒゲナガキバガ科 (3) Torodorinae 亜科, *Torodora* 属 (朴　奎澤・John B. Heppner)

台湾産ヒゲナガキバガ科の分類学的研究の第3報として, Torodorinae 亜科の *Torodora* 属6種を扱った. *T. albicruris* と *T. copillaris* の2種は新種, *T. octavana* (Meyrick), *T. sciadosa* Wu & Liu, *T. manoconta* Wu & Liu の3種は台湾新記録である. Torodorinae 亜科は35属220種からなるが, その大部分は東洋区に産する. *Torodora* 属も既知の85種のうち82種が東洋区から知られている.

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